

Brammock. M

ENTERED



1600

RAW SEQUENCE LISTING

DATE: 04/22/2003

PATENT APPLICATION: US/09/848,664A

TIME: 14:56:52

Input Set : N:\Crf3\RULE60\09848664.raw.txt

Output Set: N:\CRF4\04222003\I848664A.raw

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1 <110> APPLICANT: Sakiyama-Elbert, Shelly E.
2   Hubbell, Jeffrey A.
3 <120> TITLE OF INVENTION: Controlled Release of Non-Heparin Binding Growth
4   Factors from Heparin Containing Matrices
5 <130> FILE REFERENCE: ETH 108
6 <140> CURRENT APPLICATION NUMBER: US/09/848,664A
7 <141> CURRENT FILING DATE: 2001-05-03
8 <150> PRIOR APPLICATION NUMBER: US/09/298,084A
9 <151> PRIOR FILING DATE: 1999-04-22
10 <160> NUMBER OF SEQ ID NOS: 31
11 <170> SOFTWARE: PatentIn Ver. 2.1
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 14
15 <212> TYPE: PRT
16 <213> ORGANISM: Homo sapiens
17 <220> FEATURE:
18 <221> NAME/KEY: MOD_RES
19 <222> LOCATION: (2)
20 <223> OTHER INFORMATION: Xaa is bAla (Beta Alanine)
21 <400> SEQUENCE: 1
W--> 22   Lys Xaa Phe Ala Lys Leu Ala Ala Arg Leu Tyr Arg Lys Ala
      23         1             5             10
25 <210> SEQ ID NO: 2
26 <211> LENGTH: 8
27 <212> TYPE: PRT
28 <213> ORGANISM: Homo sapiens
29 <400> SEQUENCE: 2
      30   Tyr Lys Lys Ile Ile Lys Lys Leu
      31         1             5
33 <210> SEQ ID NO: 3
34 <211> LENGTH: 14
35 <212> TYPE: PRT
36 <213> ORGANISM: Homo sapiens
37 <400> SEQUENCE: 3
      38   Lys His Lys Gly Arg Asp Val Ile Leu Lys Lys Asp Val Arg
      39         1             5             10
41 <210> SEQ ID NO: 4
42 <211> LENGTH: 14
43 <212> TYPE: PRT
44 <213> ORGANISM: Homo sapiens
45 <220> FEATURE:
46 <221> NAME/KEY: MOD_RES
47 <222> LOCATION: (2)

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48 <223> OTHER INFORMATION: Xaa is bALA (Beta Alanine)
49 <400> SEQUENCE: 4
W--> 50 Arg Xaa Phe Ala Arg Leu Ala Ala Arg Leu Tyr Arg Arg Ala
51 1 5 10
53 <210> SEQ ID NO: 5
54 <211> LENGTH: 12
55 <212> TYPE: PRT
56 <213> ORGANISM: Homo sapiens
57 <400> SEQUENCE: 5
58 Lys Asp Pro Lys Arg Leu Tyr Arg Ser Arg Lys Tyr
59 1 5 10
61 <210> SEQ ID NO: 6
62 <211> LENGTH: 11
63 <212> TYPE: PRT
64 <213> ORGANISM: Homo sapiens
65 <400> SEQUENCE: 6
66 Cys Val Leu Ser Arg Lys Ala Val Arg Arg Ala
67 1 5 10
69 <210> SEQ ID NO: 7
70 <211> LENGTH: 10
71 <212> TYPE: PRT
72 <213> ORGANISM: Homo sapiens
73 <400> SEQUENCE: 7
74 Cys Ala Leu Ser Arg Lys Ile Gly Arg Thr
75 1 5 10
77 <210> SEQ ID NO: 8
78 <211> LENGTH: 9
79 <212> TYPE: PRT
80 <213> ORGANISM: Homo sapiens
81 <400> SEQUENCE: 8
82 Cys Thr Leu Thr Ile Lys Arg Gly Arg
83 1 5
85 <210> SEQ ID NO: 9
86 <211> LENGTH: 70
87 <212> TYPE: PRT
88 <213> ORGANISM: Homo sapiens
89 <400> SEQUENCE: 9
90 Ala Leu Asp Thr Asn Tyr Cys Phe Ser Ser Thr Glu Lys Asn Cys Cys
91 1 5 10 15
92 Val Arg Gln Leu Tyr Ile Asp Phe Arg Lys Asp Leu Gly Trp Lys Trp
93 20 25 30
94 Ile His Glu Pro Lys Gly Tyr His Ala Asn Phe Cys Leu Gly Pro Cys
95 35 40 45
96 Pro Tyr Ile Trp Ser Leu Asp Thr Gln Tyr Ser Lys Val Leu Ala Leu
97 50 55 60
98 Tyr Asn Gln His Asn Pro
99 65 70
101 <210> SEQ ID NO: 10
102 <211> LENGTH: 70

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103 <212> TYPE: PRT
104 <213> ORGANISM: Homo sapiens
105 <400> SEQUENCE: 10
106   Ala Leu Asp Ala Ala Tyr Cys Phe Arg Asn Val Gln Asp Asn Cys Cys
107     1             5             10             15
108   Leu Arg Pro Leu Tyr Ile Asp Phe Lys Arg Asp Leu Gly Trp Lys Trp
109             20             25             30
110   Ile His Glu Pro Lys Gly Tyr Asn Ala Asn Phe Cys Ala Gly Ala Cys
111             35             40             45
112   Pro Tyr Leu Trp Ser Ser Asp Thr Gln His Ser Arg Val Leu Ser Leu
113             50             55             60
114   Tyr Asn Thr Ile Asn Pro
115     65             70
117 <210> SEQ ID NO: 11
118 <211> LENGTH: 70
119 <212> TYPE: PRT
120 <213> ORGANISM: Homo sapiens
121 <400> SEQUENCE: 11
122   Ala Leu Asp Thr Asn Tyr Cys Phe Arg Asn Leu Glu Glu Asn Cys Cys
123     1             5             10             15
124   Val Arg Pro Leu Tyr Ile Asp Phe Arg Gln Asp Leu Gly Trp Lys Trp
125             20             25             30
126   Val His Glu Pro Lys Gly Tyr Tyr Ala Asn Phe Cys Ser Gly Pro Cys
127             35             40             45
128   Pro Tyr Leu Arg Ser Ala Asp Thr Thr His Ser Thr Val Leu Gly Leu
129             50             55             60
130   Tyr Asn Thr Leu Asn Pro
131     65             70
133 <210> SEQ ID NO: 12
134 <211> LENGTH: 42
135 <212> TYPE: PRT
136 <213> ORGANISM: Homo sapiens
137 <400> SEQUENCE: 12
138   Gly Ala Ser Ala Ala Pro Cys Cys Val Pro Gln Ala Leu Glu Pro Leu
139     1             5             10             15
140   Pro Ile Val Tyr Tyr Val Gly Arg Lys Pro Lys Val Glu Gln Leu Ser
141             20             25             30
142   Asn Met Ile Val Arg Ser Cys Lys Cys Ser
143             35             40
145 <210> SEQ ID NO: 13
146 <211> LENGTH: 42
147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapiens
149 <400> SEQUENCE: 13
150   Glu Ala Ser Ala Ser Pro Cys Cys Val Ser Gln Asp Leu Glu Pro Leu
151     1             5             10             15
152   Thr Ile Leu Tyr Tyr Ile Gly Lys Thr Pro Lys Ile Glu Gln Leu Ser
153             20             25             30
154   Asn Met Ile Val Lys Ser Cys Lys Cys Ser

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Output Set: N:\CRF4\04222003\I848664A.raw

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155              35              40
157 <210> SEQ ID NO: 14
158 <211> LENGTH: 42
159 <212> TYPE: PRT
160 <213> ORGANISM: Homo sapiens
161 <400> SEQUENCE: 14
162   Glu Ala Ser Ala Ser Pro Cys Cys Val Pro Gln Asp Leu Glu Pro Leu
163       1              5              10              15
164   Thr Ile Leu Tyr Tyr Val Gly Arg Thr Pro Lys Val Glu Gln Leu Ser
165               20              25              30
166   Asn Met Val Val Lys Ser Cys Lys Cys Ser
167       35              40
169 <210> SEQ ID NO: 15
170 <211> LENGTH: 294
171 <212> TYPE: PRT
172 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 15
174   Phe Ser Gln Ser Phe Arg Glu Val Ala Gly Arg Phe Leu Ala Ser Glu
175       1              5              10              15
176   Ala Ser Thr His Leu Leu Val Phe Gly Met Glu Gln Arg Leu Pro Pro
177               20              25              30
178   Asn Ser Glu Leu Val Gln Ala Val Leu Arg Leu Phe Gln Glu Pro Val
179               35              40              45
180   Pro Gln Gly Ala Leu His Arg His Gly Arg Leu Ser Pro Ala Ala Pro
181               50              55              60
182   Lys Ala Arg Val Thr Val Glu Trp Leu Val Arg Asp Asp Gly Ser Asn
183       65              70              75              80
184   Arg Thr Ser Leu Ile Asp Ser Arg Leu Val Ser Val His Glu Ser Gly
185               85              90              95
186   Trp Lys Ala Phe Asp Val Thr Glu Ala Val Asn Phe Trp Gln Gln Leu
187               100             105             110
188   Ser Arg Pro Pro Glu Pro Leu Leu Val Gln Val Ser Val Gln Arg Glu
189               115             120             125
190   His Leu Gly Pro Leu Ala Ser Gly Ala His Lys Leu Val Arg Phe Ala
191               130             135             140
192   Ser Gln Gly Ala Pro Ala Gly Leu Gly Glu Pro Gln Leu Glu Leu His
193       145             150             155             160
194   Thr Leu Asp Leu Arg Asp Tyr Gly Ala Gln Gly Asp Cys Asp Pro Glu
195               165             170             175
196   Ala Pro Met Thr Glu Gly Thr Arg Cys Cys Arg Gln Glu Met Tyr Ile
197               180             185             190
198   Asp Leu Gln Gly Met Lys Trp Ala Lys Asn Trp Val Leu Glu Pro Pro
199               195             200             205
200   Gly Phe Leu Ala Tyr Glu Cys Val Gly Thr Cys Gln Gln Pro Pro Glu
201               210             215             220
202   Ala Leu Ala Phe Asn Trp Pro Phe Leu Gly Pro Arg Gln Cys Ile Ala
203       225             230             235             240
204   Ser Glu Thr Ala Ser Leu Pro Met Ile Val Ser Ile Lys Glu Gly Gly
205               245             250             255

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206      Arg Thr Arg Pro Gln Val Val Ser Leu Pro Asn Met Arg Val Gln Lys
207                      260      265      270
208      Cys Ser Cys Ala Ser Asp Gly Ala Leu Val Pro Arg Arg Leu Gln His
209                      275      280      285
210      Arg Pro Trp Cys Ile His
211                      290
213 <210> SEQ ID NO: 16
214 <211> LENGTH: 73
215 <212> TYPE: PRT
216 <213> ORGANISM: Homo sapiens
217 <400> SEQUENCE: 16
218      Ser Pro Asp Lys Gln Met Ala Val Leu Pro Arg Arg Glu Arg Asn Arg
219      1                      5                      10                      15
220      Gln Ala Ala Ala Ala Asn Pro Glu Asn Ser Arg Gly Lys Gly Arg Arg
221                      20                      25                      30
222      Gly Gln Arg Gly Lys Asn Arg Gly Cys Val Leu Thr Ala Ile His Leu
223                      35                      40                      45
224      Asn Val Thr Asp Leu Gly Leu Gly Tyr Glu Thr Lys Glu Leu Ile
225                      50                      55                      60
226      Phe Arg Tyr Cys Ser Gly Ser Cys Asp
227                      65                      70
229 <210> SEQ ID NO: 17
230 <211> LENGTH: 73
231 <212> TYPE: PRT
232 <213> ORGANISM: Homo sapiens
233 <400> SEQUENCE: 17
234      Leu Gly Ala Arg Pro Cys Gly Leu Arg Glu Leu Glu Val Arg Val Ser
235      1                      5                      10                      15
236      Glu Leu Gly Leu Gly Tyr Ala Ser Asp Glu Thr Val Leu Phe Arg Tyr
237                      20                      25                      30
238      Cys Ala Gly Ala Cys Glu Ala Ala Ala Arg Val Tyr Asp Leu Gly Leu
239                      35                      40                      45
240      Arg Arg Leu Arg Gln Arg Arg Arg Leu Arg Arg Glu Arg Val Arg Ala
241                      50                      55                      60
242      Gln Pro Cys Cys Arg Pro Thr Ala Tyr
243                      65                      70
245 <210> SEQ ID NO: 18
246 <211> LENGTH: 61
247 <212> TYPE: PRT
248 <213> ORGANISM: Homo sapiens
249 <400> SEQUENCE: 18
250      Ala Ala Glu Thr Thr Tyr Asp Lys Ile Leu Lys Asn Leu Ser Arg Asn
251      1                      5                      10                      15
252      Arg Arg Leu Val Ser Asp Lys Val Gly Gln Ala Cys Cys Arg Pro Ile
253                      20                      25                      30
254      Ala Phe Asp Asp Asp Leu Ser Phe Leu Asp Asp Asn Leu Val Tyr His
255                      35                      40                      45
256      Ile Leu Arg Lys His Ser Ala Lys Arg Cys Gly Cys Ile
257                      50                      55                      60

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2
Seq#:4; Xaa Pos. 2

VERIFICATION SUMMARY

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Input Set : N:\Crf3\RULE60\09848664.raw.txt

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L:22 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0

L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0